EBIO 329: Animal Biology & Physiology

Animal Biology & Physiology: 3 credits
Meeting: MWF 9–9:50 a.m., Room: CHECK OWLSPACE THE WEEKEND BEFORE CLASS
The evolution and systematics of the animal kingdom with consideration of functional anatomy, comparative physiology, behavior, medical implications and resource management.
Distribution Group III, Biosciences Group B
Pre-requisite(s): BIOS/BIOC 201 and BIOS/EBIO 202 or permission of instructor

Faculty: Paul Havlak, Ph.D.
Office: Anderson Bio Labs 211 C
Office Hours: TBA
Email: havlak@rice.edu

Overview
A survey of animal evolution & phylogeny and the structures and processes by which such multicellular organisms handle intake & excretion, fuel & oxygen transport, and control & movement. You will learn how evolutionary history constrains solutions to many problems, while occasional innovations can produce widely divergent forms and functions. This comparative approach will illuminate human anatomy and physiology in their elegance and awkwardness.

By the end of the course, students will be expected to (1) show knowledge of animal evolution and resulting shared and derived traits and behaviors, including an understanding of animal body organization and functions; and (2) demonstrate critical thinking and problem solving skills in evaluating explanations and experimental reports.

Required Course Materials
Textbook: *Animal Physiology*, Hill, Wyse, & Anderson, 3rd edition, Sinauer 2012

- ISBN: 9780878935598
- The Campus Bookstore won't have it in stock yet. Their estimated prices:
  - Print, new: $154.60; rental: $100.50
  - eBook, buy: $103.90; rent (for 180 days): $55.00
- Amazon's prices:
  - Hardcover: Amazon $116.90, Used $94.09
  - Paperback: Amazon $89.51, Used $93.99

Course website on OwlSpace:
https://owlspace-ccm.rice.edu/portal/site/EBIO-329-001-Sp14/page/f9362ce1-8b32-4267-955c-8144694d6108

Class Meetings (MWF 9–9:50 a.m., Room: Check OwlSpace)
Class meetings will involve some combination of lectures, videos, and interactive discussions. Lectures will build on assigned readings and will often cover material not covered in the textbook. Students are expected to come to meetings with a working understanding of the assigned reading material. Unless told otherwise, students are responsible for all material covered in class meetings.

Classroom participation grades contributing five or more points to the final evaluation (see below) will be pre-announced.

Quizzes
Online quizzes will be made available up to twice per week with schedule to be announced, covering the preceding class material and the current assigned readings. Once you have begun a quiz you will have 30 minutes to complete it. ***All quizzes are open-book, open-notes, closed-internet and with no other aid beyond book & notes.***

Exams
There will be one or two online evening exams, one hour each, and a two-hour final exam. ***Exams are closed-book, closed-notes, and closed-internet,*** with no outside assistance (including from classmates or other students).

Evaluation
Quizzes: 100 points
Exams: 100 points each
Participation: 50 points

Honor code
All quizzes and exams will be administered online via Owlspace. See above for the differing policies on quizzes vs. exams. Students are NOT allowed to work together on exams or quizzes, and any evidence of violation of these policies, including online or outside help, will be submitted for an Honor Council investigation.

Disabilities
Any student with a disability requiring accommodations in this class is encouraged to speak with the instructor within the first two weeks of class and also to contact Disability Support Services in Allen Center.